



Michael Bloomberg, CEO, Bloomberg L.P.

The end of innovation?

Not quite. But this financial news pioneer argues that there are limits to the amount of new technology people can use and the amount of information they can absorb.

When Michael Bloomberg was asked to leave Salomon Brothers in 1981 because of a difference of opinion on the investment banking firm's future direction, it was one of those fortunate firings that pushed the business world ahead. With \$10 million in walking money, Bloomberg developed a tool that would become indispensable, first, to bond traders (he had been one himself) and, ultimately, to the entire financial community.

The idea for the Bloomberg terminal, which resembles a personal computer, began with its creator recognizing that Wall Street's methods for valuing one security against another were slow and too dependent on seat-of-the-pants guesses. "Something that could show instantly whether government bonds were appreciating faster than corporate ones would make smart investors out of mediocre ones," Bloomberg observes in his autobiography, *Bloomberg on Bloomberg*.

Today, the 100,000-plus Bloomberg terminals around the world deliver not only immediate changes in bond and stock prices—their histories and comparisons to one another—but also a full range of business and financial stories reported by Bloomberg journalists. The Bloomberg domain, staffed by 4,600 employees, produces three magazines as well. *Bloomberg Morning News* appears on 210 public television stations in the United States. In addition, a 24-hour broadcast of Bloomberg Television is available by cable and direct telecast to 70 million households around the world.

Amazingly, in less than 20 years, Bloomberg's name has come to have the same authority in trading rooms and on financial news desks as those of his venerable forebears: Dow, Jones and Reuters.

Bloomberg owns 80 percent of Bloomberg L.P.; Merrill Lynch, his early backer and first customer, owns

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the rest. Bloomberg estimates 1998 revenues at about \$1.6 billion.

This is the Information Age, the epoch in which billions of bytes of information, circulating instantaneously around the world, have transformed education, politics, entertainment, medicine, business—many of the most fundamental aspects of our lives. Did you know what e-mail was three years ago? Could you function without it today? Recently, *Outlook* Managing Editor Letitia Barroll and former *Fortune* Washington bureau chief Lee Smith sat with Bloomberg at his bustling headquarters on New York's Park Avenue to talk about, among other things, how the shape of the Information Age will change over the next several years.

Outlook: The rapid flow of information that technology has made possible has changed the world enormously in recent years. How will information change the world in the years to come?

Bloomberg: I think we've come to what [Intel CEO] Andy Grove would call an inflection point. In the last half a dozen years, innovation kept everything going. The next few years are going to be the period where we stop all the innovation, where we absorb what we have. We will make [innovation] more reliable and user-friendly. We will figure out which things we can afford and drop the things that we can't afford. In our case, customer service is what's really important.

In technological advances, this society has run into a stone wall. The public can't see the difference between the current generation of PCs and the generation to come. PCs are as powerful as they need to be. So for the first time, instead of the capability doubling every year, the capability is staying the same and the price is coming down. All of a sudden, people

are saying they don't need more and more power and capacity in their PCs.

This is especially interesting coming from someone whose name connotes enormous amounts of information delivered almost instantaneously.

There is a limit to how many new things people can use or absorb. So I think information technology is going to take a breather. It's not to say the period of innovation won't come back, but nothing goes on at this pace forever. We don't need so many different options on our word processing program. We don't need so many different Internet sites. Once you fill the screen faster than the eye can see, what's the point of doubling your speed? Once you give me more information than I can possibly find, what's the point?

As an individual investor, you put your money in a mutual fund. You don't need more business news. The whole idea is you've hired a professional. You don't ever have to read the paper again. Go back to your job. It's probably the most intelligent thing for an individual to do.

In that case, are we entering a period of reduced ambitions, in which we will be happier doing less?

All of a sudden, I think, we're in a period where we're going to stop and say, "Enough. I can't afford everything. Let me absorb what I've been doing and think about where I'm going. I'll make my product more user-friendly and cut out those things we don't really need." How many new markets can you go into? Before, everybody opened an office in Zambia. It is the Third World—you had to be there. Today, people are starting to say, "Wait a second. I can go into Zambia, but I'm not going to sell anything there."

What are the remaining barriers to our access to information and, by extension, to our understanding of the world?

The technological barriers are being removed. In theory, anybody can send anything over the Internet to everybody. But you've got to know who the audience is and how to address them, or the audience has got to know that you have something, and they've got to come in and request it. The problem isn't so much the ability to communicate. It's the ability to find the one piece of information you need amid all the clutter. I think that's why a lot of focus in Internet and technology stocks is on [Web] browser companies that help people find their way. I don't think that there's a lack of information out there. Quite the contrary: There's so much information nobody can find anything.

In the information business, is there a need for more interpretation, more wisdom?

The bigger the library, the more you need a librarian, and perhaps the less you can automate the librarian. The mechanical process of going through data and looking at every reference to a subject is something computers can do better than human beings. But when you have so much information that passes before you on the screen, you've got to have somebody who can help you understand. We made the mistake of thinking that the numbers have a validity of their own. We made a mistake of thinking that the computer can actually make decisions for us.

If you take a look at where the computer has really improved our way of doing things, it is on the production line, not in the office. There are the farmers in their tractors with [global positioning system] receivers and PCs controlling what kind of fertilizer gets

sprayed on one tiny patch, depending on how the sun hits it, the slope, the drainage.

But computers haven't changed offices as fundamentally. There is certainly a keyboard and screens and a PC on each desk. But no economist has ever really found any great improvement in office productivity because of the computer. It's just not clear that anybody is going to show that management decisions are much better than they used to be. Take a look at the results of companies. They still go to excesses.

So what is the answer to this particular information dilemma?

I would argue that getting back to the basics of interpersonal skills, of looking at people, being able to talk to them, being able to understand where they are really coming from, setting policies, being a leader—those kinds of skills are important.

The Internet supplies information—and also misinformation. How do we sort out the good from the bad?

You cannot do the research on every piece of information to see how accurate it is. You depend on the source or your feeling, your judgment, your recollection, your impression that the source is accurate. In the past, in order to be a source [of information], you had to have a lot of money and, basically, be sanctioned by the government. You couldn't get a radio-TV license if you didn't have government acquiescence, and it cost a fortune to buy a radio-TV station—and to print, distribute books, magazines and newspapers.

The masthead on the newspaper gives you some feeling about how well reported and edited these stories are, and if it says *National*

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Enquirer, you expect a different standard than if it says *The New York Times*. All of a sudden, anybody can produce content and distribute it [on the Internet]. The trouble with the Internet is that you don't see the masthead or the source [of the content] that can make up the masthead.

So an organization with credentials, such as Bloomberg, helps people sort out the true from the false?

Yes. Except who died and left me playing God? But people in the news business do look to *The New York Times* to make the decision on what news gets into print. People do look to Bloomberg to make sure there are at least two sources and that it's consistent with other things. In that sense, we do play God. The trouble is that only parts of the public understand that you're better off letting *The New York Times* inform you than the *Star* or the *Enquirer*, that you're better off letting Bloomberg inform you on the newswire than [online reporter] Matt Drudge.

What worries you about our global economy? Is this really the worst crisis in 50 years?

At the moment, the politics in Russia are the scariest thing [to have emerged] in the last 10 or 15 years, because it's a big country and a nuclear power. One way Russia could try to solve its problems would be to start a war in the Middle East. We went to war in the Middle East to keep the price of oil down, so why shouldn't they start a war in the Middle East to get the price of oil up? And I'm not so sure they won't do that. That's the kind of stuff I worry about more than the whole world going into recession.

Any concerns about the industrialized countries?

Japan is going to get through its

banking crisis. But, unfortunately, Europe is starting down the road to more restrictive labor laws. That may slow down the world economy more than the Asian flu. I don't have a lot of interest in expanding the number of employees Bloomberg has in Europe. In one [country], the employees wanted a year's sabbatical for everyone. That's crazy.

Was there enough information available, in advance, to indicate that a global economic crisis would start in Southeast Asia?

The numbers were there. The two tallest buildings in the world are a pair in Kuala Lumpur, connected by a bridge. They look great from afar. But when you look inside, there's no one there. They've never been finished, because there aren't any tenants for them. But Western investors never focused on that. We wanted to lend the Malaysians money. Why? Because others were doing it. Why? Because the returns were so high. But high returns mean high risk. We keep forgetting about that—and maybe now [forgetting] with greater rapidity.

So we do not learn from our mistakes?

Maybe the cycles are getting shorter, but only a historian can really tell you that. The fact of the matter is we make slightly different mistakes, but, fundamentally, they're the same mistakes every cycle. People made mistakes with the mortgage market, with the S&Ls, with biotech stocks.

The fact that Russia after the fall of the czar defaulted on its debt and never paid anybody back was well known. But nobody in the West focused on that. Why? Maybe everybody said, "Well, I know it's going to happen, but as long as I get my money out first, I'll be okay." All you had to do was go to Russia and watch the people. They never had

any intention of paying back the money. There's no law, there's no tradition of long-term contracts, there's no understanding of capitalism and responsibility.

Who do you admire in the business community?

I don't know that there are many great leaders in the business world who are taking companies in new directions. Rather than sitting back and saying, "How does this fit in? What's my business?" everybody downsizes at the same time, for example, because it's fashionable.

The great advances are made by the guy who stands up and says, "This is my vision, and I'm going there come hell and high water." I like [Virgin Group CEO] Richard Branson, who tries new things, marches to his own drummer, could care less what anybody else thinks. [News Corporation CEO] Rupert Murdoch also has a vision, gets into new markets, gets knocked down, comes back. Did [Time Warner vice chairman and CNN founder] Ted Turner bring down the Berlin Wall and the Evil Empire and open China? No, but he produced programming at the right time, and the technology was there to distribute it. He is as good an embodiment of the Information Age as anyone.

Are there things you regret not having done?

The only thing, in retrospect, that I'm sorry about is that I didn't go to Vietnam. We sent our sons and daughters to die there, and then the public never appreciated what they did. And it had nothing to do with whether the war was good or bad.

I happen to be a great believer that America is where I want my kids to grow up, and it's given me opportunities that no other place in the

world ever would have, *ever*. And I didn't do my part. When I got out of business school, I was heading to Vietnam. It turns out I had flat feet and they didn't want me.

I didn't have a lot of say in the big things that happened in my life. They were done by something or somebody else. Salomon Brothers threw me out. Why did I start Bloomberg? Because nobody offered me a job. Maybe I did something unique and maybe I didn't. Maybe my success was an accident. Everybody always has that feeling. I assume that if I had to do it all over again, I would succeed.

But am I willing to take it all, put everything in one big pile of dollar bills, light the match, burn it and then start from scratch? No—although I'd love to see what my kids would say about that if I called them up and said, "Guess what I just did?" ■

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